

IN THE CLAIMS

1-7 (canceled)

8. (new) A method comprising subjecting a  $\text{TiO}_2$  residue from a sulfate process to heat treatment and, without being mixed further with other substances, performing a metallurgical process or preparing a refractory material with the heat treated  $\text{TiO}_2$  residue.
9. (new) The method according to claim 8, wherein the  $\text{TiO}_2$  residues are subjected to heat treatment at from 100 to 1300°C.
10. (new) The method according to claim 8, wherein the  $\text{TiO}_2$  residues are in powder form or in the form of molded bodies.
11. (new) The method according to claim 9, wherein the  $\text{TiO}_2$  residues are in powder form or in the form of molded bodies.
12. (new) The method of claim 8, wherein the  $\text{TiO}_2$  residue comprises from 35 to 70 wt. %  $\text{TiO}_2$ ; from 5 to 40 wt.%  $\text{SiO}_2$ ; from 2 to 15 wt.% of iron compounds; from 1 to 15 wt.%  $\text{MgO}$ ; and from 0.5 to 15 wt.%  $\text{CaO}$ .
13. (new) The method of claim 8, wherein  $\text{TiO}_2$  residue comprises calculated as oxides from 20 to 80 wt.%  $\text{TiO}_2$ ; from 2 to 30 wt.%  $\text{SiO}_2$ ; from 0 to 15 wt.%  $\text{Al}_2\text{O}_3$ ; from 0 to 15 wt. %  $\text{Fe}_2\text{O}_3$ ; from 1 to 15 wt.%  $\text{MgO}$ ; from 0 to 15 wt.%  $\text{CaO}$ .
14. (new) The method according to claim 8, wherein the dried  $\text{TiO}_2$  residues are injected into a metallurgical furnace.
15. (new) The method according to claim 8, wherein the dried  $\text{TiO}_2$  residues are used in a tap hole mass.
16. (new) The method of claim 9, wherein the  $\text{TiO}_2$  residue comprises from 35 to 70 wt. %  $\text{TiO}_2$ ; from 5 to 40 wt.%  $\text{SiO}_2$ ; from 2 to 15 wt.% of iron compounds; from 1 to 15 wt.%  $\text{MgO}$ ; and from 0.5 to 15 wt.%  $\text{CaO}$ .
17. (new) The method of claim 10, wherein the  $\text{TiO}_2$  residue comprises from 35 to 70 wt. %  $\text{TiO}_2$ ; from 5 to 40 wt.%  $\text{SiO}_2$ ; from 2 to 15 wt.% of iron compounds; from 1 to 15 wt.%  $\text{MgO}$ ; and from 0.5 to 15 wt.%  $\text{CaO}$ .

18. (new) The method of claim 11, wherein the  $\text{TiO}_2$  residue comprises from 35 to 70 wt. %  $\text{TiO}_2$ ; from 5 to 40 wt. %  $\text{SiO}_2$ ; from 2 to 15 wt. % of iron compounds; from 1 to 15 wt. %  $\text{MgO}$ ; and from 0.5 to 15 wt. %  $\text{CaO}$ .
19. (new) The method of claim 9, wherein  $\text{TiO}_2$  residue comprises, calculated as oxides, from 20 to 80 wt. %  $\text{TiO}_2$ ; from 2 to 30 wt. %  $\text{SiO}_2$ ; from 0 to 15 wt. %  $\text{Al}_2\text{O}_3$ ; from 0 to 15 wt. %  $\text{Fe}_2\text{O}_3$ ; from 1 to 15 wt. %  $\text{MgO}$ ; from 0 to 15 wt. %  $\text{CaO}$ .
20. (new) The method of claim 10, wherein  $\text{TiO}_2$  residue comprises, calculated as oxides, from 20 to 80 wt. %  $\text{TiO}_2$ ; from 2 to 30 wt. %  $\text{SiO}_2$ ; from 0 to 15 wt. %  $\text{Al}_2\text{O}_3$ ; from 0 to 15 wt. %  $\text{Fe}_2\text{O}_3$ ; from 1 to 15 wt. %  $\text{MgO}$ ; from 0 to 15 wt. %  $\text{CaO}$ .
21. (new) The method of claim 11, wherein  $\text{TiO}_2$  residue comprises, calculated as oxides, from 20 to 80 wt. %  $\text{TiO}_2$ ; from 2 to 30 wt. %  $\text{SiO}_2$ ; from 0 to 15 wt. %  $\text{Al}_2\text{O}_3$ ; from 0 to 15 wt. %  $\text{Fe}_2\text{O}_3$ ; from 1 to 15 wt. %  $\text{MgO}$ ; from 0 to 15 wt. %  $\text{CaO}$ .
22. (new) The method of claim 12, wherein  $\text{TiO}_2$  residue comprises, calculated as oxides, from 20 to 80 wt. %  $\text{TiO}_2$ ; from 2 to 30 wt. %  $\text{SiO}_2$ ; from 0 to 15 wt. %  $\text{Al}_2\text{O}_3$ ; from 0 to 15 wt. %  $\text{Fe}_2\text{O}_3$ ; from 1 to 15 wt. %  $\text{MgO}$ ; from 0 to 15 wt. %  $\text{CaO}$ .
23. (new) The method according to claim 9, wherein the dried  $\text{TiO}_2$  residues are injected into a metallurgical furnace.
24. (new) The method according to claim 10, wherein the dried  $\text{TiO}_2$  residues are injected into a metallurgical furnace.
25. (new) The method according to claim 11, wherein the dried  $\text{TiO}_2$  residues are injected into a metallurgical furnace.
26. (new) The method according to claim 12, wherein the dried  $\text{TiO}_2$  residues are injected into a metallurgical furnace.
27. (new) The method according to claim 13, wherein the dried  $\text{TiO}_2$  residues are injected into a metallurgical furnace.
28. (new) The method according to claim 14, wherein the dried  $\text{TiO}_2$  residues are injected into a metallurgical furnace.
29. (new) The method according to claim 15, wherein the dried  $\text{TiO}_2$  residues are injected into a metallurgical furnace.
30. (new) The method of claim 8, wherein a metallurgical process is performed.

31. (new) The method of claim 8, wherein a refractory material is prepared.